

NEW COMBINATIONS AND A NEW SPECIES OF PERENNIAL CRYPTANTHA

Larry C. Higgins¹

The preparation of a revision of the perennial *Cryptantha*, subgenus *Oreocarya* of North America, has led to the recognition of an undescribed species, and to adjustments in nomenclature. The conclusions presented here are the results of three years work with this group. Numerous field trips resulting in the collection of several thousand herbarium sheets has partially filled in some of the gaps in the distribution and understanding of this subgenus.

The writer wishes to express his thanks to the Society of Sigma Xi for their grant-in-aid of research, which made it possible to do the necessary field work for this paper.

1. *Cryptantha shackletteana* sp. nov.

A *C. spiculifera* (Piper) Payson, differt foliis longior et angustior, pilis pustulatis nullis, inflorescentia subcapitata, nuculis lineari-lanceolatis longior proprietaibus evidentibus minoribus.

Herbae perennes caespitosae. 1-3 dm altae; caules graciles, infirmi, 1-plures 0.7-1.8 dm longi, strigosi et setosi effusi pilis gracilibus infirmisque; folia lineari 2-13 cm longa, 0.1-0.5 cm lata, strigosa supra et infra, pilis pustulatis inconspicuis paucis dorsaliter; inflorescentia angusta. 0.2-0.8 dm longa; segmenta calycum linearia vel anguste lanceolata, sub anthesi 3-5 mm longa, sub fructu 7-10 mm longa, setis flavidis divaricatis; pedicelli 0.5-1 mm longi; corolla alba, tubo 3-3.3 mm longo cristis ad basi tubi conspicuis, fornicibus flavis emarginatis 0.5 mm longis, limbo 5-6 mm lato; stylus fructo excedens ab 1.3-1.6 mm; nuculae lanceolatae 3.3-3.6 mm longae, 1.6-2 mm latae, pleumque totae quatuor evolutar, marginibus acutis, contiguis pagina dorsalis muricata et rugulosa cristis humilibus inconspicuisque pagina ventralis similis sed proprietaibus evidentibus minoribus; sulcus aperta, subulatus, marginibus sine elevatibus.

Caespitose perennial herbs, 1-3 dm tall; stems slender, weak, 1-several, 0.7-1.8 dm long, strigose and spreading setose with slender weak hairs; leaves linear, 0.1-0.5 cm wide, 2-13 cm long, strigose on both surfaces, and with a few inconspicuous pustulate hairs on the dorsal surface; inflorescence narrow, nearly capitate, 0.2-0.8 dm long; calyx segments linear or narrowly lanceolate, in anthesis 3-5 mm long, in fruit becoming 7-10 mm long, with yellowish spreading hairs; pedicels 0.5-1 mm long; corolla white, the tube 3-3.3 mm long, crests at base of tube conspicuous, fornices yellow, emarginate, 0.5 mm long, limb 5-6 mm broad; style exceeding mature fruit 1.3-1.6 mm; nutlets lanceolate, 3.3-3.6 mm long, 1.6-2

1. Department of Botany, Brigham Young University, Provo, Utah.



Figure 1. Habit sketch of *Cryptantha shackletleana* showing the narrow leaves, capitate inflorescence, and both surfaces of a Single Nutlet.

mm wide, usually all four maturing, the margins acute, in contact, dorsal surface muricate and rugulose with the ridges low and inconspicuous, the ventral surface similar but the markings much less evident, scar open, subulate, and without an elevated margin.

Type. Locality; Alaska: On steep, southfacing slope of Eagle Bluff, about one mile northwest of Eagle. Growing with *Artemisia frigida* and *Agropyron smithii*, 26 July, 1968, Stanley L. Welsh and Glen Moore 8629. Holotype deposited at BRY.

Distribution. Apparently confined to the type locality near Eagle, Alaska. Growing on serpentine talus slopes, 1,000 to 1,500 feet. Flowering from June to July.

Specimens Examined. Alaska, USA, on dry slope of ultrabasic talus, Mission Bluff, Eagle area, 1,300 feet, June 26, 1960. Hansford T. Shacklette 6183 (US).

Cryptantha shackletteana is probably closely related to *C. spiculifera* but differs in the longer and narrower leaves with only inconspicuous pustulate hairs, the more capitate inflorescence, longer and narrower nutlets with less evident markings, and weaker stems.

This species is named in honor of Hansford T. Shacklette, who is a student of Alaskan Botany and Geology, and who was the first to collect this distinctive species.

2. *Cryptantha* subgenus *Oreocarya* (Greene) stat. nov.

(Based on *Oreocarya* Greene, Pitt. 1:57-58. 1887.)

Payson included all the species in this subgenus under the section *Oreocarya*, but if a sectional name is to be used it cannot be *Oreocarya*, but must be *Pseudomyosotis* according to the rules. Rather than use a sectional name all the perennial species have been elevated to the rank of subgenus.

Eritrichium section *Pseudomyosotis* A. DC. Prod. 10:129. 1846.

Krynitzkia section *Pterygium* Gray, Proc. Am. Acad. 20:276. 1885 in part.

Krynitzkia section *Pseudokrynitzkia* Gray, Proc. Am. Acad. 20:276-280. 1885 in large part.

Hemisphaerocarya Brand, Fedde, Rep. Spec. Nov. 24:59. 1927.

Cryptantha section *Oreocarya* (Greene) Payson, Ann. Mo. Bot. Gard. 14:237. 1927.

3. *Cryptantha fulvocanescens* (Gray) Payson var. *echinoides* (M.E. Jones) Higgins stat. nov. (Based on: *Krynitzkia echinoides* M. E. Jones, Proc. Calif. Acad. Sci. II 5:709. 1895.)

REFERENCES

- PAYSON, E. B., 1927. A monograph of the section *Oreocarya* of *Cryptantha*, Ann. Mo. Bot. Gard. 14:211-359.